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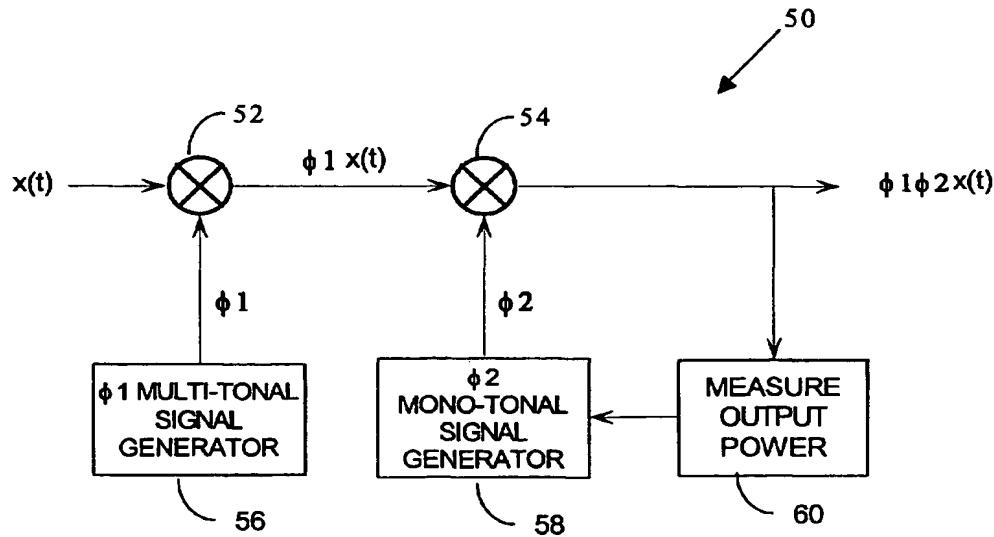
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(54) Title: DOWN CONVERSION METHODOLOGY AND TOPOLOGY WHICH COMPENSATES FOR SPURIOUS RESPONSE



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(57) **Abstract:** There is a need for an inexpensive, high-performance, fully-integrable, multistandard transceiver, which suppresses spurious noise signals. The invention provides a topology that satisfies this need, providing a first mixer for receiving an input signal $x(t)$, and mixing it with a multi-tonal mixing signal ϕ_1 to generate an output signal $\phi_1 x(t)$, and providing a second mixer for receiving the $\phi_1 x(t)$ signal, and mixing it with a mono-tonal mixing signal ϕ_2 , to generate an output signal $\phi_1 \phi_2 x(t)$. The two mixing signals emulate an LO signal because $\phi_1 * \phi_2$ has significant power at the frequency of the LO signal being emulated. The topology also includes a power measurement circuit for measuring the power of the output signal $\phi_1 \phi_2 x(t)$. This power output signal is used to vary the characteristics of the mono-tonal mixing signal ϕ_2 to reduce the power level of said output signal.